



# Field Sampling and Testing Qualification Program

**September 5 – 27, 2018**

# Field Sampling and Testing Qualification Program

## September 5 – 27, 2018

The Personnel Qualification Program for Field Sampling & Testing has been developed for qualifying persons in the sampling and testing methods for which they have demonstrated the knowledge and ability to properly perform the procedures required by those methods. The Materials Testing and Research Branch will provide a two-part (written and performance) concrete, asphalt, soils and aggregate qualification examination for inspectors. The qualification for all three units will be held at the Materials Testing & Research Branch, 2530 Likelike Highway, Honolulu, Hawaii 96819 on the following dates; except Asphalt Unit on September 10,11, 26,27 that will be at DKI Inter. Airport Conference Center, 300 Rodgers Blvd, Honolulu HI. 96819:

**September 5 - 7, 2018**  
**(Concrete Unit - Priority to Government Employees)**

**September 12—18, 2018 (1<sup>st</sup> Session)**  
**September 19-25, 2018 (2<sup>nd</sup> Session)**  
**(Soils & Aggregate Unit)**

**September 8, & 10-11, 2018 (1<sup>st</sup> Session)**  
**September 22, & 26-27, 2018 (2<sup>nd</sup> Session)**  
**(Asphalt Unit)**

### Notes:

1. Personnel arriving late for the Exams will not be allowed to take the written or performance exam forfeits their application fees and will have to be rescheduled for the next set of examinations.
2. Personnel with expired qualification must be re-qualified to perform field sampling and testing of materials on all HDOT Highway construction projects and all County Federal-Aid Highway construction projects.
3. In the event a participant with qualification time remaining from their previous examination for the Concrete Unit Asphalt Unit or the Soils and Aggregate Unit fails the September 2018 qualification examination for any of those Units, the participant will lose their qualification time remaining for the units that the participant failed. Qualification time remaining does not accumulate; qualification is only good for five years.
4. The Transportation Personnel Qualification Program recognizes the American Concrete Institute (ACI) and Western Alliance for Quality Transportation Construction (WAQTC) on case by case basis, of certification programs for technicians performing sampling and testing activities on Portland cement concrete.



# Schedule of Events

## Concrete Unit

<b>September 5, 2018</b> 7:30 a.m. – 3:00 p.m.	Classroom Review of Test Methods (Maximum 12 persons)
<b>September 6, 2018</b> 7:30 a.m. – 3:00 p.m.	Hands-on Practice (Maximum 12 persons)
<b>September 7, 2018</b> 7:30 a.m. – 3:00 p.m.	Written & Performance Exam (Maximum 12 persons)

## Soils and Aggregate Unit

### 1<sup>st</sup> Session

<b>September 12, 2018</b> 7:30 a.m. – 3:00 p.m.	Classroom Review of Test Methods and Soils Classifications (Maximum 24 persons)
<b>September 13, 2018</b> 7:30 a.m. – 3:00 p.m.	Hands-on Practice – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 14, 2018</b> 7:30 a.m. – 3:00 p.m.	Written & Performance Exam – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 17, 2018</b> 7:30 a.m. – 3:00 p.m.	Hands-on Practice – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 18, 2018</b> 7:30 a.m. – 3:00 p.m.	Written & Performance Exam – Soils & Aggregate Unit (Maximum 12 persons)

### 2<sup>nd</sup> Session (If Necessary – 1<sup>st</sup> Session is filled)

<b>September 19, 2018</b> 7:30 a.m. – 3:00 p.m.	Classroom Review of Test Methods and Soils Classifications (Maximum 24 persons)
<b>September 20, 2018</b> 7:30 a.m. – 3:00 p.m.	Hands-on Practice – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 21, 2018</b> 7:30 a.m. – 3:00 p.m.	Written & Performance Exam – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 24, 2018</b> 7:30 a.m. – 3:00 p.m.	Hands-on Practice – Soils & Aggregate Unit (Maximum 12 persons)
<b>September 25, 2018</b> 7:30 a.m. – 3:00 p.m.	Written & Performance Exam – Soils & Aggregate Unit (Maximum 12 persons)

# Schedule of Events

## Asphalt Unit

### 1<sup>st</sup> Session

**September 8, 2018 (Sat.)**

8:30 a.m. – 11:30 a.m.

1:00 p.m. – 4:00 a.m.

Classroom Review for Consultants @HWY-L

1<sup>st</sup> Session (Maximum 12 persons)2<sup>nd</sup> Session (Maximum 12 persons) (If necessary)**September 10, 2018**

8:30 a.m. – 11:30 p.m.

1:00 p.m. – 4:00 p.m.

Classroom Review @DKI Inter. Airport Conference Center

1<sup>st</sup> Session (Maximum 12 persons)2<sup>nd</sup> Session (Maximum 12 persons) (If necessary)**September 11, 2018**

8:30 a.m. – 10:30 a.m.

1:00 p.m. – 4:00 p.m.

Written Exam @DKI Inter. Airport Conference Center

Exam (Maximum 48 persons)

Retest (Maximum 48 persons)

### 2<sup>nd</sup> Session (If Necessary – 1<sup>st</sup> Session is filled)

**September 22, 2018 (Sat.)**

8:30 a.m. – 11:30 a.m.

1:00 p.m. – 4:00 a.m.

Classroom Review for Consultants @HWY-L

1<sup>st</sup> Session (Maximum 12 persons)2<sup>nd</sup> Session (Maximum 12 persons)**September 26, 2018**

8:30 a.m. – 11:30 a.m.

1:00 p.m. – 4:00 a.m.

Classroom Review @DKI Inter. Airport Conference Center

1<sup>st</sup> Session (Maximum 12 persons)2<sup>nd</sup> Session (Maximum 12 persons)**September 27, 2018**

8:30 a.m. – 10:30 a.m.

1:00 p.m. – 3:00 p.m.

Written Exam @DKI Inter. Airport Conference Center

Exam (Maximum 48 persons)

Retest (Maximum 48 persons)

### Notes:

1. A study guide which includes copies of the sampling and testing methods will be provided to each participant for the Concrete, Asphalt and the Soils and Aggregate units after registration.
2. Appropriate wear is recommended and shoes are required during practical examinations.



# Exam & Registration Information

## THE EXAMINATION

The two-part (written and performance) examination will include the following test methods:

### **Bituminous (Asphalt) Materials Unit**

1. AASHTO T40 – Sampling Bituminous Materials
2. AASHTO T168 – Sampling Bituminous Paving Mixtures

### **Soils and Aggregate Materials Unit**

1. AASHTO T2 – Sampling Aggregates
2. Hawaii HDOT TM1 – Density of Soil In-Place by the Sand Cone Method
3. Hawaii HDOT TM3 – Field Determination of Moisture Contents in Soils

### **Concrete Materials Unit (Similar to ACI)**

1. AASHTO T23, ASTM C31 – Making and Curing Concrete Specimens in the Field
2. AASHTO T119, ASTM C143 – Slump of Hydraulic Cement Concrete
3. AASHTO R60, ASTM C172– Sampling Freshly Mixed Concrete
4. AASHTO T309, ASTM C1064 – Temperature of Freshly Mixed Hydraulic Cement Concrete
5. AASHTO T121, ASTM C138 – Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
6. AASHTO T152, ASTM C231 – Air Content of Freshly Mixed Concrete by the Pressure Method
7. AASHTO T196, ASTM C173 – Air Content of Freshly Mixed Concrete by the Volumetric Method

## REGISTRATION FOR EXAMINATIONS

To register for the Concrete, Asphalt and/or the Soils and Aggregate methods units' qualification examinations, complete forms (HDOT-TPQP-1 and HDOT TPQP-2) and mail the forms with a check to:

Materials Testing and Research Branch  
Attn: FSTQP – Sept 2018  
2530 Likelike Highway  
Honolulu, Hawaii 96819

Make checks payable to:  
Hawaii Department of Transportation

Note: There are no registration fees for Highways or County personnel.

**DEADLINE: Registration form & payment for Concrete, Asphalt, Soils and Aggregates units must be received by the MTRB by 4:30 p.m., Friday, August 3, 2018.**

Last day to cancel, for refund of Concrete Asphalt, Soils and Aggregates units is Friday, August 10, 2018. To request cancellation and a refund, please contact Ms. Faith Keene at (808) 832-3404 or e-mail her at [Faith.F.Keene@hawaii.gov](mailto:Faith.F.Keene@hawaii.gov).

If you have any questions on registration, for Concrete, Asphalt, Soils and Aggregates Units, please contact Ms. Faith Keene by phone at (808) 832-3404 or e-mail at [Faith.F.Keene@hawaii.gov](mailto:Faith.F.Keene@hawaii.gov).

A study guide with sampling and testing methods will be provided for Concrete, Asphalt and the Soils and Aggregates units after registration.

# Examination Procedures

## Field Sampling and Testing

### Qualification Program

## QUALIFICATION REQUIREMENTS

1. Participants who have passed both the written and performance examinations for the test methods in the Asphalt Unit, Concrete Unit, or the Soils and Aggregates Unit will be qualified for that Unit and a certificate with their qualifications will be issued to the participant.
2. Failure in either the written examination or the performance examination of a test method in the Asphalt Unit, Concrete Unit, or the Soils and Aggregate Unit will constitute failure to qualify for the Unit in which the failure occurred.
3. Participants with time remaining on their existing qualification will forfeit their qualification time remaining for the Units in which the participants failed to obtain qualification through the September 2018 examination.

## WRITTEN EXAMINATION

1. Closed book exam.
2. Questions will not be allowed during the examination.
3. If not provided, calculators are allowed for the examination but may not be shared. Phones are not allowed to be used during the examination.
4. The examiner will collect all examination papers and used scratch paper.
5. Participant must pass with a minimum score of 70% on each test method. ACI requires 60% minimum score on each test method, and 70% minimum combined score to pass.
6. The participant must pass the written exams for 50 percent or more of the test methods in a Unit to continue with the examination for that Unit. ACI written examination is graded by ACI and will take appx 2 to 4 weeks for results; performance exam will not be affected by written exam.
7. If the participant passes 50 percent or more of the written exams for the test methods in a Unit, the participant will be allowed one retake of the written exams for the test methods that the participant failed in the Unit. Failure of a written exam retake for any of the test methods in a Unit is failure to obtain qualification for that Unit. \* ACI allows retest regardless of percent pass.

## PERFORMANCE EXAMINATION

1. Closed book exam.
2. Coaching from the examiner will not be allowed during the examination.
3. Each examination shall be completed within the time limit designated for that test method.
4. The participant may be required to verbally describe material sampling procedures if performance of the method is not practical or feasible.
5. The participant shall perform all the required procedures for each test method. Omission of one or more of the required procedures for a test method will constitute failure of that test method. The Examiner may allow certain procedures to be accelerated. Inability to complete the test procedures within the designated time limit will constitute a failure of the test method. ACI allows for two trials on each of the test methods.
6. If the participant notices an error that was made during the performance of the test method, the participant will be allowed one restart for each test method.
7. The participant must pass the performance exams for 50 percent or more of the test methods in a Unit to continue with the examination for that Unit.
8. If the participant passes 50 percent or more of the test methods in a Unit, the participant will be allowed one retake of the performance exams for the test methods that the participant failed in that Unit. Failure of a performance exam retake for any of the test methods in a Unit is failure to obtain qualification for that Unit.  
\* (ACI may differ slightly in implementation of the process)  
\* Retake of an ACI written or a performance exam incurs an additional fee. Payment and retake of these exams are arranged separately

# Hawaii Transportation Personnel Qualification Program Registration Form

**Deadline: August 3, 2018**

**Check one:**

☐ Initial Qualification

☐ Renewal of Qualification

## PARTICIPANT CONTACT INFORMATION

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Position Title: \_\_\_\_\_ Bargaining Unit: \_\_\_\_\_

E-mail Address: \_\_\_\_\_ Office HWY- \_\_\_\_\_

Employer's Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

If Participant's employer is making class arrangements, please include the following information.

Contact Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Contact E-mail Address: \_\_\_\_\_

Study Guides: ☐ Mail ☐ Pick-up

**NOTE:**

Participants should bring their pocket calculator, pen, and pencils. Phones are not allowed to be used during the examination.

Appropriate wear is recommended and shoes are required during practical examinations.

Refreshments and Lunch will be provided to all participants.

## DESIRED QUALIFICATIONS

☐ Bituminous (Asphalt) Unit \$200

☐ Soils & Aggregate Unit \$300

☐ Concrete Unit \$350

Examination Fee

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**TOTAL** \_\_\_\_\_

Office use only:

Check #: \_\_\_\_\_ Study Guides: \_\_\_\_\_

Amount: \_\_\_\_\_ Certificates: \_\_\_\_\_

# Transportation Personnel Qualification Program (TPQP)

Qualification carries inherent rights and responsibilities. These rights include being exclusively sanctioned along with others so qualified by TPQP to perform sampling, testing, and reporting of test results for quality control and quality assurance programs. These responsibilities include performing and reporting tests with the accuracy and precision expected of the individual in accordance with the required test procedures. By signing this document, the individual agrees to abide by all the terms of the TPQP and as set forth by the contracting agency.

## RIGHTS AND RESPONSIBILITIES AGREEMENT

This document affirms that \_\_\_\_\_ hereinafter  
(print name)

the applicant, desires to be qualified by the Transportation Personnel Qualification

Program (TPQP) in the: ☐ Bituminous (Asphalt) Unit

☐ Soils & Aggregate Unit

☐ Concrete Unit

The applicant should also be aware that both State and Federal laws may govern construction projects, including Title 18, United State Code, Section 1020, that in brief states that anyone making falsifications on Federal-aid projects,

**“Shall be fined not more than \$10,000 or imprisoned not more than five years, or both.”**

I, \_\_\_\_\_, have read, understand, and agree to abide by the rights, responsibilities, and penalties associated with receipt of this qualification.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date



# Highways Division

## State of Hawaii Department of Transportation

### Highways — Materials Quality Assurance Program

The Materials Quality Assurance (QA) Program represents the Hawaii Department of Transportation, Highways Division's recognition of its responsibility and commitment to ensure that materials incorporated into highway construction projects conform substantially to requirements of the plans and specifications. This program provides uniform, statewide procedures to ensure personnel can perform materials sampling and testing in accordance with test methods used in the program.

All personnel performing field sampling and testing of materials for all State Highway construction projects (Federal & State funded) and all County Federal-Aid projects on the National Highway System (NHS), shall be qualified per the QA Program's Personnel Qualification Program of the Quality Assurance Manual for Materials. In accordance with Title 23 CFR, Part 637, the sampling and testing must be performed by qualified sampling and testing personnel.

Personnel must successfully pass a two-part (written and performance) examination to become qualified to perform field sampling and testing of materials for all State Highways construction projects and all County Federal-Aid projects on the NHS.

Personnel who successfully pass the two-part examination will receive a 5-year qualification

certificate. All qualified personnel must requalify every 5 years. To requalify for another 5 years, personnel must successfully pass the two-part examination.

Personnel who are qualified and are actively performing field sampling and testing of materials on various State Highways construction projects and all County Federal-Aid projects on the NHS, shall participate in the MTRB's Independent Assurance (IA) Program on an annual basis.

The purpose of the IA program is to provide uniform, statewide procedures to ensure personnel qualified under the Personnel Qualification Program remain capable of performing sampling and testing correctly, and to ensure testing equipment is checked and calibrated.

Personnel from the MTRB will schedule the annual IA evaluation with the Quality Assurance (QA) Officer at the four Highways District Offices (Oahu, Hawaii, Maui & Kauai). If you have any questions concerning the program, please contact Mr. Casey Abe at (808) 832-3405 ext. 105.



Materials Testing and Research Branch  
Hawaii DOT – Highways Division  
2530 Likelike Highway  
Honolulu, Hawaii 96819 – 2928